

**CLAIMS**

1. A method of wireless communication comprising:

5 transmitting at least one sub-frame associated with a second frame

using at least a first and a second wireless resource if an acknowledgement message associated with a first frame is received, and

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using at least a second wireless resource if a non-acknowledgement message associated with the first frame is received.

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2. The method of Claim 1, wherein the first and second least wireless resources comprise at least one of a channelization code, a channelization tone and an allocate transmit power level.

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3. The method of Claim 2, comprising:

transmitting at least one sub-frame associated with the first frame using at least the first wireless resource.

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4. The method of Claim 3, comprising:

transmitting at least another sub-frame from the first frame using at least  
the first wireless resource in response to receiving the non-  
acknowledgement message associated with the first frame.  
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5. The method of Claim 4, wherein the at least another sub-frame of the  
first frame using the first wireless resource is transmitted concurrently with the  
10 transmitting of the at least one sub-frame from the second frame using the  
second wireless resource in response to receiving the non-acknowledgement  
message associated with the first frame.

15 6. The method of Claim 5, wherein at least one of the first and second  
frames comprises a plurality of incrementally redundant sub-frames.

7. The method of Claim 6, wherein at least one of the first and second  
20 frames comprises at least one do-not-transmit sub-frame.

8. The method of Claim 7, wherein the first and second frames are  
assigned to a single user.

9. The method of Claim 6, comprising:

transmitting a subsequent sub-frame of the plurality of incrementally redundant sub-frames of the first frame in response to a non-acknowledgment message associated with a most recently transmitted sub-frame of the first frame.

10. The method of Claim 9, comprising:

terminating the transmitting of remaining sub-frames of the plurality of incrementally redundant sub-frames of the first frame in response to receiving an acknowledgement message associated with a most recently transmitted sub-frame of the first frame.

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11. The method of Claim 5, comprising:

transmitting at least one sub-frame from a subsequent frame

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using at least the first wireless resource if a non-acknowledgement message associated with the second frame is received, and

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using at least the first and the second wireless resources if an acknowledgement message associated with the second frame is received.

12. The method of Claim 11, wherein the acknowledgement message associated with the second frame is received in response to the receipt of one the incrementally redundant sub-frames of the second frame.

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13. The method of Claim 5, wherein at least one of the first and second frames comprises at least one of a voice sub-frame, a video sub-frame and a wireless gaming sub-frame.

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14. A method of wireless communication comprising:

receiving one sub-frame of a plurality of sub-frames associated with a second frame

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using at least a first and a second wireless resource if an acknowledgement message associated with a first frame is transmitted, and

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using at least the second wireless resource if a non-acknowledgement message associated with the first frame is transmitted.

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15. The method of Claim 14, wherein the first and second least wireless resources comprise at least one of a channelization code, a channelization tone and an allocate transmit power level.

16. The method of Claim 15, comprising at least one of:

receiving a sub-frame associated with the first frame using at least the  
first wireless resource; and

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failing to receive any sub-frames associated with the first frame before  
timing out.

10 17. The method of Claim 16, comprising:

awaiting reception of one sub-frame of a plurality of sub-frames  
associated with the first frame using at least the first wireless resource in  
response to transmitting the non-acknowledgement message associated  
15 with the first frame.

18. The method of Claim 17, wherein the one sub-frame of the first frame  
using the first wireless resource is received concurrently with the receiving of  
20 the one sub-frame from the second frame using the second wireless resource in  
response to transmitting the non-acknowledgement message associated with  
the first frame.

25 19. The method of Claim 18, wherein at least one of plurality of sub-frames  
associated with the first and second frames comprises a plurality of  
incrementally redundant sub-frames.

20. The method of Claim 19, wherein the first and second frames are assigned to a single user.

5      21. The method of Claim 19, comprising:

10            awaiting reception of a subsequent sub-frame of the plurality of incrementally redundant sub-frames of the first frame in response to a non-acknowledgment message associated with a most recently received sub-frame of the first frame.

15      22. The method of Claim 17, comprising:

15            receiving one sub-frame of a plurality of sub-frames associated with a subsequent frame

20            using at least the first wireless resource if a non-acknowledgement message associated with the second frame is transmitted, and

using at least the first and the second wireless resources if an acknowledgement message associated with the second frame is transmitted.

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23. The method of Claim 22, wherein the acknowledgement message associated with the second frame is transmitted in response to the receipt of one the incrementally redundant sub-frames of the second frame.

24. The method of **Claim 18**, wherein at least one of the first and second frames comprises at least one of a voice sub-frame, a video sub-frame and a  
5 wireless gaming sub-frame.